

6. Website Navigation

Table of Contents

Weather.gov	2
Point-and-Click	3
<u>Observations</u>	4
Radar	4
Graphical Forecast	5
Area Forecast Discussion	5
Hourly Weather Graph	6
Climate Information	6
Rivers and Lakes	7
Map Display Order	8

Click on description to go directly to the page.

6. Website Navigation

The NWS website is one of the most powerful tools available to disseminate information to NWS partners and the public. An immense amount of information can be found on the website; the trick is in knowing where to find it. This section will point out some of the most requested information from the sites.

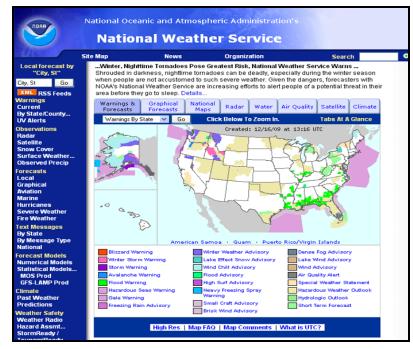
WWW.WEATHER.GOV or MOBILE.WEATHER.GOV

NWS websites provide a great deal of useful information for anyone looking for national and local weather data.

The information in the following pages will describe the www.weather.gov website. A slimmed down version is available for mobile use, but is different from the information shown here

The main NWS website has national information including graphical forecasts, surface maps, national radar and plenty of other information.

Local office websites are accessible from this page by clicking an area on the map. Local websites are also available by using the www.weather.gov address followed by / and either the office identifier, or for most sites, the name of a major city in the county warning area.

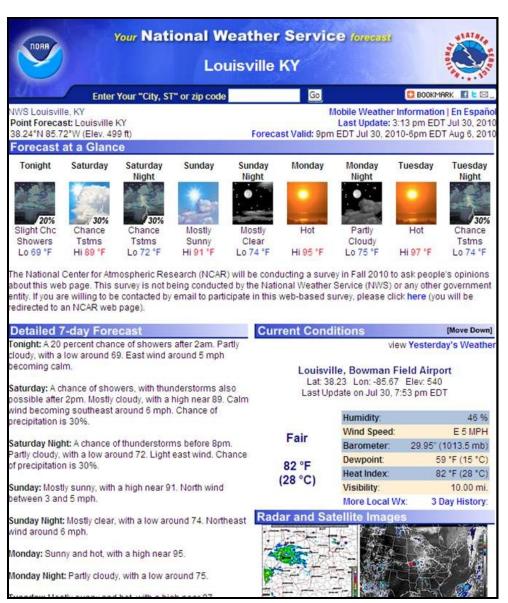




Most local office websites all have the same general design with a clickable map for point-andclick forecasts, the local radar and weather story. They also have a menu on the left for more information. Offices outside of the conterminous

The area map on every site is color coded for any headline or pertinent weather information for each county. In this example, the tan color represents hazardous weather outlooks that are in effect for the highlighted counties. See: <u>Display Organization</u> on Page 98.

Also note at the top of many sites are news stories that can provide additional information on current weather and water issues, past events and summaries or other useful detail.



Clicking a location on the map from a local office page or typing in a city name or zip code will bring up the **point-and-click forecast** for the specific location selected. This forecast is a detailed text and graphic forecast for a 2.5 or 5km block, including the exact point selected.

A quick view of the forecast is across the top of the page with graphic displays of the forecasted weather condition for each period.

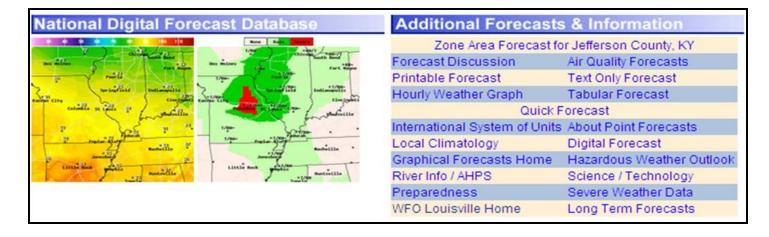
Below this on the left will be a list of any active headlines or other non -routine products for the location. In addition, more detailed forecast information is available.

Also, in this view are the current conditions for the closest observing site (usually an airport), a link to the local radar and a national satellite picture.

All forecast products found on the website are based on a daytime period of 6 a.m. to 6 p.m., and night-time period of 6 p.m. to 6 a.m.

Numbered items on this page will be explained further in the following pages.

At the bottom of the point-and-click page are some additional useful links. The maps on the left of this bar are links to the national digital forecast database. This database is explained in more detail in the following pages. Also found here are links to the zone forecast, the area forecast discussion, hourly weather graphs, a tabular hour-by-hour forecast, as well as some other text and graphic products. The numbered items in the graphics on this page will be explained further.



From the point-and-click forecast page, just below the current conditions is a link to the 3 -day observation history for the nearest site.

The 3-day history page lists all regular observations, decoded into plain language. Wind, visibility, weather, sky condition, temperature, dew point, altimeter and sea level pressure are all listed. In addition, the 6-hour maximum and minimum temperatures are listed. Some stations will also report the amount of liquid precipitation that fell during the time period. In general, NWS ASOS (automated surface observing stations) will report precipitation, and privately or state owned AWOS (automated weather observing stations) will not.

Some regions are transitioning to a new version of this page with graphs, but the information is all the same.

Weather observations for the past three days Jacksonville, New River, Marine Corps Air Station														
		En	ter Your	"City, ST" or zip	code			Go				en	espa	ňol
D			Temperature (°F)			Pres	sure	Precipitation (in.)						
а	Time		Vis. (mi.)	Weather	Sky Cond.	Tomperat		6 hour			sea			
t e	(edt)					Air	Air Dwpt	Max.	Min.	altimeter (in.)	level (mb)	1 hr	3 hr	6 hr
15	20:56	E 12	10.00	A Few Clouds	FEW060	82	75			30.03	1017.1			
15	19:56	SE 9	10.00	Fair	CLR	84	77	99	84	30.01	1016.3			
15	18:56	SE 7	10.00	Fair	CLR	87	72			30.00	1016.0			
15	17:56	SE 6	10.00	Light Rain	BKN040 BKN080	86	73			29.99	1015.6			
15	16:56	SE 10	10.00	Mostly Cloudy	BKN065	94	74			29.98	1015.2			
15	15:56	S 9	10.00	Mostly Cloudy	BKN065	93	75			29.96	1014.8			
15	14:56	NW 6	10.00	A Few Clouds	FEW060	97	70			29.97	1015.1			
15	13:56	Calm	10.00	A Few Clouds	FEW050	96	71	96	78	29.98	1015.5			
15	12:56	Calm	10.00	Partly Cloudy	FEW025 SCT120	94	74			29.99	1015.7			
15	11:56	N 6	10.00	Partly Cloudy	SCT140	92	72			29.99	1015.8			
15	10:56	Calm	10.00	Mostly Cloudy	BKN140	86	73			29.99	1015.7			
15	09:56	W 6	10.00	Mostly Cloudy	SCT120 BKN200	82	73			29.98	1015.4			
15	08:56	NW 3	10.00	Fair	CLR	80	71			29.98	1015.2			
15	07:56	N 5	10.00	Partly Cloudy	SCT120	80	70	80	72	29.96	1014.8			
15	06:56	Calm	10.00	A Few Clouds	FEW120	74	70			29.95	1014.4			
15	05:56	Calm	10.00	Fair	CLR	72	70			29.94	1013.9			
45	04:56	M/ 2	10.00	Foir	CLB	72	60			20.02	1012.6			

One of the most popular tools on NWS websites is the **radar display**. Clicking on the link will bring up a still image of base reflectivity. To loop this image, click on loop after Base under the Reflectivity heading in the menu to the left of the display. The loop is an animation of about one hour of radar images. While in loop mode, controls will be at the bottom of the image to start or stop the loop, set it to "rock" back and forth, or change the loop speed. The user can also step through the images, or omit certain images from the loop.

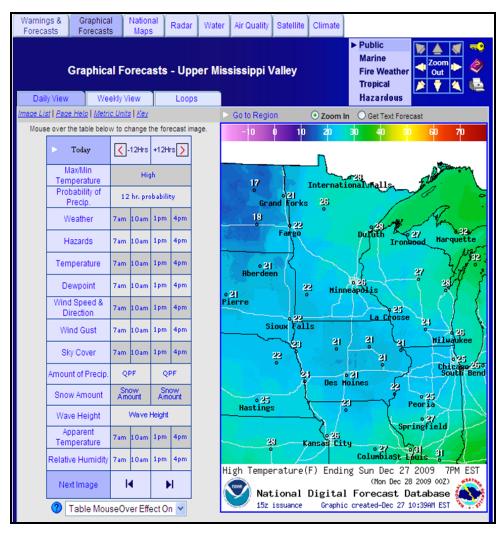
Also available from the menu bar on the left are velocity images and loops as well as 1-hour and storm total precipitation data. Links to other regional radar views are also located in this menu. At the top of the menu, using the arrows, the

user can move quickly to adjacent radar sites.



The page also has options that can be toggled on and off, located at the bottom of the radar image. Terrain, counties and highways are a few of the features that can be turned on and off.

The radar image itself can appear different based on settings controlled at the local office. In particular, the radar may be set to "clear air mode" or one of a number of precipitation modes. Clear air mode is used when there is no precipitation, or when precipitation is light and reflectivity values are small. Drizzle or snow is frequently sampled better in a clear air mode. Besides the colors on the image, the other noticeable difference for most users is the frequency of samples. Image update frequency ranges from around 4 to around 10 minutes.



The National Digital Forecast Database graphical forecast is a tool that allows the user to quickly visualize the weather across the state or region, not just a single point. This view is very similar to what the forecaster sees as he or she is preparing the forecast. The view can be zoomed to a state view by clicking on the map.

Controls for this page are left of the map. The user will mouse over the forecast hour and parameter of interest. Near the top of the control panel, are arrows to move forward or back between forecast periods as well. Another viewing option is to use the weekly viewer from the tab near the top of the page, or the image loop.

Also, holding a mouse pointer over one of the forecast sample points on the map will bring up more detail for that specific point.

The area forecast discussion or AFD is a fairly technical discussion designed to give some insight into what the challenges of the forecast were and share the thoughts of the forecaster as he or she was preparing the forecast.

Often, abbreviations or short-hand wording is used as well as technical terms and it can be difficult to read. To help, there is a glossary option at the top of the discussion page, that if turned on will highlight many of these abbreviations and technical terms. Clicking on the highlighted word will link to its definition.

Additionally, a short list of some of the more common abbreviations is on Page 132 of this guidebook.

AREA FORECAST DISCUSSION

NATIONAL WEATHER SERVICE PHOENIX AZ 936 AM MST WED OCT 20 2010

.SYNOPSIS...

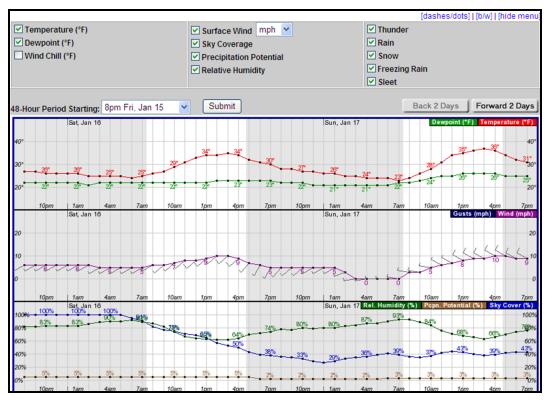
A SLOW MOVING LOW PRESSURE SYSTEM OVER ARIZONA AND SOUTHERN
CALIFORNIA WILL LEAD TO AN INCREASE IN SHOWER AND THUNDERSTORM
CHANCES TODAY AND TONIGHT. BRIEF HEAVY RAIN...SMALL HAIL...AND
STRONG WINDS WILL BE POSSIBLE WITH THE THUNDERSTORMS. RAIN CHANCES
WILL DECREASE FROM WEST TO EAST ON THURSDAY AS THE SYSTEM MOVES
EASTWARD INTO NEW MEXICO. DRY CONDITIONS CAN BE EXPECTED FRIDAY
THROUGH TUESDAY. TEMPERATURES WILL BE WELL BELOW NORMAL TODAY AND
THURSDAY BEFORE A GRADUAL WARMING TREND TAKES PLACE FRIDAY THROUGH
EARLY NEXT WEEK.

& 8

.DISCUSSION...

UPPER LEVEL LOW PRESSURE CENTERED OVER SOUTHERN CALIFORNIA CONTINUES TO BRING SCATTERED SHOWERS TO THE REGION THIS MORNING. THE AXIS OF SHOWERS HAS BEEN PRIMARILY LOCATED FROM CASA GRANDE TO WICKENBURG...WITH A SECONDARY AREA OF SHOWERS ACROSS NORTHERN LA PAZ COUNTY. OTHERWISE CONDITIONS WERE MAINLY DRY UNDER CLOUDY SKIES.

FOR THE REMAINDER OF THE AFTERNOON HOURS...I EXPECT ADDITIONAL SHOWERS TO DEVELOP AS THE CENTER OF THE UPPER LOW MOVES OVERHEAD AND



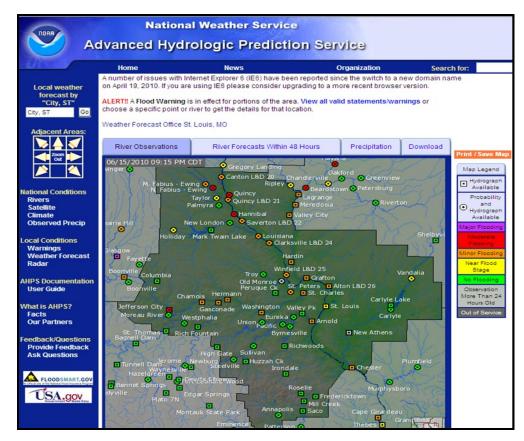
Another view of the forecast information that gives the user more detail of the expected conditions is the **hourly weather graph**. The link to this is also located in the lower right corner of the point-and-click page.

This graph gives detailed hour-by-hour information of each parameter in the forecast. The user can customize the view by turning certain parameters on and off, and can change the time period of the forecast view.

The **climate section** of the NWS website provides a vast amount of information on historical weather conditions. This page is accessed from the forecast office home page, selecting the "Local" title under the Climate header. The observed weather section on the climate page provides detailed weather information for specific cities in the area. The Daily Climate Report is a breakdown of all weather conditions on a particular day, including temperatures, precipitation, wind information, heating/cooling degree days, as well as normal values and records. The Preliminary Monthly Climate Data product provides an overview for the entire month of the main weather parameters. This product also provides information on monthly departure from normal for temperature and precipitation. Additionally, from the climate page, the user can select the NOWData tab to access information from sites in the CWA that are not necessarily official climate reporting stations. These cites are most often information from cooperative observers. These observers are trained by the local office, and generally report data once per day. A variety of information is available for these locations.

Other information from this includes: page links to climate prediction information, mostly from the Climate Prediction Center. astronomical data and a custompage of ized informalocal tion specific for each office.





Hydrologic information is also available from our website. On the left hand blue menu of the main website, under the Hydrology header, select "Rivers and Lakes". The locations on this map are sites where a gauge is available to record data on the height of the water in the river or lake. These locations are color coded based on the current level of the river. points have no flooding; vellow locations are in the bank full or action stage. Orange, red or purple icons mean that this location is currently above flood stage and is experiencing minor, moderate or major flooding, respectively.

Clicking on one of the locations will bring up a graph of the past several days of river stage data. Also, if a forecast is currently being produced, green points will indicate the expected river levels for the coming days. The blue vertical line down the middle of this graph shows the current time. This webpage will also show the exact location of the gage, as well as historic records of high and low water levels.



The information provided in these pages is only a sample of all the information that can be found on any National Weather Service website. Additional information is available on all websites. Local offices also customize sections of the websites and have more information specific to the office.

Weather.gov Map Display Organization

The NWS issues a variety of non-routine weather messages to alert the general public of current or impending weather hazards. The NWS also relays, through its communication systems several non-weather-related emergency messages, such as one for 911 telephone outages. All of these messages are broken down into four main categories: warnings for life/property-threatening hazards, advisories for not life-threatening hazards, watches for favorable conditions which could lead to hazards and statements for follow-ups.

When a non-routine message has been generated for a location, the appropriate county or counties will be color-coded on the U.S. map on the main NWS page or on the county maps on WFO homepages. The names or types of non-routine messages currently in effect are listed below or to the right of the base-map. While there may be multiple products currently in effect for a single county, only one color can be displayed. For this reason, the products have been prioritized into the four categories listed above. It must be stressed that the layering priority does not reflect the NWS opinion of the exact local threat priority of each weather hazard. Any weather hazard, or non-weather hazard, can be just as deadly as any other depending on the circumstances. Below is the layering priority for display purposes only.

1	Tsunami Warning	41	Flood Statement	76	Air Stagnation Advisory
2	Tornado Warning	42	Tsunami Advisory	77	Low Water Advisory
3	Extreme Wind Warning	43	Wind Chill Warning	78	Local Area Emergency
4	Severe Thunderstorm Warning	44	Extreme Cold Warning	79	Avalanche Watch
5	Flash Flood Warning	45	Hard Freeze Warning	80	Blizzard Watch
6	Shelter In Place Warning	46	Freeze Warning	81	Inland Tropical Storm Watch
6	Evacuation - Immediate	47	Red Flag Warning	82	Tropical Storm Watch
7	Civil Danger Warning	48	Hurricane Watch	82	Tropical Storm Watch
7	Nuclear Power Plant Warning	48	Hurricane Watch	82	Inland Hurricane Watch
7	Radiological Hazard Warning	48	Typhoon Watch	83	Winter Storm Watch
7	Hazardous Materials Warning	48	Typhoon Watch	87	Coastal Flood Watch
7	Fire Warning	49	Hurricane Local Statement	84	Lakeshore Flood Watch
7	Civil Emergency Message	49	Typhoon Local Statement	85	Flood Watch (for forecast points)
8	Law Enforcement Warning	50	Snow and Blowing Snow Advisory	85	Flood Watch (areal)
9				86	High Wind Watch
	Hurricane Force Wind Warning	51	Freezing Rain Advisory	87	Excessive Heat Watch
9	Inland Hurricane Warning	51	Freezing Drizzle Advisory	88	Extreme Cold Watch
10	Hurricane Warning	52	Sleet Advisory	89	Wind Chill Watch
10	Typhoon Warning	53	Winter Weather Advisory	90	Lake Effect Snow Watch
11	Special Marine Warning	54	Lake Effect Snow and Blowing Snow Advisory	90 91	
11	Marine Weather Statement	54	Lake Effect Snow Advisory	91	Freeze Watch
12	Blizzard Warning	55	Wind Chill Advisory		Fire Weather Watch
13	Ice Storm Warning	56	Heat Advisory	93	Extreme Fire Danger
14	Inland Tropical Storm Warning	57	Urban and Small Stream Flood Advisory	94	Child Abduction Emergency
15	Heavy Snow Warning	57	Small Stream Flood Advisory	95	911 Telephone Outage
16	Winter Storm Warning	57	Arroyo and Small Stream Flood Advisory	96	Coastal Flood Statement
17	High Wind Warning	57	Flood Advisory	97	Lakeshore Flood Statement
18	Tropical Storm Warning	57	Hydrologic Advisory	98	Special Weather Statement
19	Storm Warning	58	Lakeshore Flood Advisory	99	Marine Weather Statement
20	Tsunami Watch	58	Coastal Flood Advisory	100	Hazardous Weather Outlook
21	Avalanche Warning	59	Flood Advisory (for forecast points)	101	Short Term Forecast
22	Earthquake Warning	60	High Surf Advisory	102	Administrative Message
23	Volcano Warning	61	Blowing Snow Advisory	103	Test
24	Coastal Flood Warning	62	Snow Advisory		
25	Lakeshore Flood Warning	63	Heavy Freezing Spray Warning		
26	Flood Warning (areal)	64	Dense Smoke Advisory		
27	Flood Warning (for forecast points)	65	Small Craft Advisory For Hazardous Seas		
28	High Surf Warning	65	Small Craft Advisory for Rough Bar		
29	Sleet Warning	65	Small Craft Advisory for Winds	For	more information on the
30	Lake Effect Snow Warning	65	Small Craft Advisory	colo	rs for each of these prod-
31	Excessive Heat Warning	66	Brisk Wind Advisory		-
32	Dust Storm Warning	67	Hazardous Seas Warning	ucts	, see:
33	PDS - Tornado Watch	68	Dense Fog Advisory		
34	Tornado Watch	69	Lake Wind Advisory	http:/	//www.nws.noaa.gov/
35	PDS - Severe Thunderstorm Watch	70	Wind Advisory		
36	Severe Thunderstorm Watch	71	Blowing Dust Advisory	<u>ww</u> a	map-prd/wwacolortab.php?
37	Flash Flood Watch	72	Frost Advisory	x=1	
38	Severe Weather Statement	73	Ashfall Advisory	<u>X— I</u>	
39	Flash Flood Statement	74	Freezing Fog Advisory		
40	Gale Warning	75	Freezing Spray Advisory		
I	-		•		